2012 Legislature TPS Report 58434v2

Agency: Commerce, Community and Economic Development

Grants to Municipalities (AS 37.05.315) Grant Recipient: North Slope Borough

Project Title: Project Type: New Construction and Land Acquisition

North Slope Borough - Kaktovik Airport Relocation

State Funding Requested: \$10,000,000 House District: 40 / T

One-Time Need

Brief Project Description:

The funding will be used to relocate the Kaktovik airport.

Funding Plan:

Total Project Cost: \$50,282,000 Funding Already Secured: (\$40,282,000) FY2013 State Funding Request: (\$10,000,000) **Project Deficit:**

Funding Details:

Federal AIP funds 36,000,000 NSB match 4.282.000

Detailed Project Description and Justification:

This project would complete the funding package for the new Kaktovik airport. The existing airport is on an exposed gravel spit located northeast of Barter Island between the Okpilak and Jago rivers on the Beaufort Sea. The existing runway is exposed to water on three sides and is periodically submerged by Beaufort Sea storms. The new airport will be in the center of Barter Island. This action is necessary to provide a flood-resistant facility above the 100 year elevation that is consistent with FAA's mission and design standards. The NSB andthe airport sponsor, proposes to construct a new 4,500-foot by 100-foot runway, taxiway, apron, access road, and airport lighting system. A new access road, landfill and sewage lagoon will be constructed and the existing landfill and sewage lagoon will be closed and the land used for the apron area. The material source for this project will be from an upland source on the mainland approximately 3.5 miles south of Barter Island. An ice road will be constructed across the Kaktovik Lagoon for the material haul. The project will require approximately 873,000 cubic yards of gravel fill.

Project Timeline:

See attached project estimate prepared by HDL October 21,2011.

Construction will proceed in two phases, phase 1 will begin in FY 12 and Phase 2 will begin in FY 13.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

North Slope Borough

For use by Co-chair Staff Only:

3:19 PM 5/2/2012

Federal Tax ID: 9200042378

2012 Legislature TPS Report 58434v2

| Grant Recipient | Contact | Information: |
|------------------------|---------|--------------|
|------------------------|---------|--------------|

Name: James Sceeles

Title: Director, Capital Improvement Projects Management

Address: 1274 Agvik St.

Barrow, Alaska 99723

Phone Number: 852-0200

Email: james.sceeles@north-slope.org

Has this project been through a public review process at the local level and is it a community priority? X Yes No

Page 2

Contact Name: Christine Hess Contact Number: 465-4833 For use by Co-chair Staff Only:

3:19 PM 5/2/2012



75% Project Estimate Kaktovik Airport Relocation Project

Prepared for North Slope Borough by:

Mark Swenson, P.E. Ryan Norkoli, P.E.

HATTENBURG DILLEY & LINNELL Engineering Consultants

3335 Arctic Blvd., Ste. 100 Anchorage, AK 99503 Phone: 907.564.2120 Fax: 907.564.2122

October 21, 2011

Project Cost Summary

| Project Phase | Duration | Estimated onstruction Cost | C | stimated enstruction dmin Cost | С | 10% Total Project Contingency Cost | | Total Project Cost | | | | 95% FAA Funded | | 5% Local Match |
|------------------|-------------------------|----------------------------------|----|--------------------------------------|----|---------------------------------------|----|-----------------------|----|------------|----|-------------------|--|-------------------|
| Phase 1 | July 2012 - Aug 2013 | \$ 20,011,650 | \$ | 1,500,000 | \$ | 2,151,165 | \$ | 23,663,000 | 5 | 22,480,000 | ş | 1,183,000 | | |
| Phase 2 | Aug 2013 - Dec 2014 | \$ 20,741,000 | \$ | 1,000,000 | \$ | 2,174,100 | \$ | 23,915,000 | \$ | 22.719.000 | \$ | 1,196,000 | | |
| Phase 3 | Dec 2014 - Sept 2015 | \$ 1,958,200 | \$ | 500,000 | \$ | 245,820 | \$ | 2,704,000 | 5 | 2,569,000 | \$ | 135,000 | | |
| | | \$ 42,710,850 | \$ | 3,000,000 | \$ | 4,571,000 | \$ | 50,282,000 | \$ | 47,768,000 | \$ | 2,514.000 | | |

TOTAL PROJECT ESTIMATE

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | U | nit Bid Price | A | mount Bid |
|--------------------|---|-----------|----------|----|---------------|----|--------------|
| D-701a(1) | Corrugated Steel Pipe, 30-inch | 900 | L.F. | \$ | 225.00 | \$ | 202,500.00 |
| D-701a(2) | Corrugated Steel Pipe, 24-inch | 225 | LF. | \$ | 200.00 | \$ | 45,000.00 |
| D-701a(3) | Corrugated Steel Pipe, 12-inch | 250 | L.F. | \$ | 175.00 | \$ | 43,750.00 |
| F-162a | 8-foot Chain-Link Fence | 4,300 | L.F. | \$ | 175.00 | \$ | 752,500.00 |
| F-162c | 20-foot Wide Double Swing Gate | 1 | Each | \$ | 5,000.00 | \$ | 5,000.00 |
| F-162e | 24-foot Wide Double Cantilever Gate | 1 | Each | \$ | 8,000.00 | \$ | 8,000.00 |
| F-162f | 4-foot Wide Pedestrian Gate (w/Keyless Lock) | 2 | Each | \$ | 1,500.00 | \$ | 3,000.00 |
| F-170a | Steel Bollard | 10 | Each | \$ | 1,200.00 | \$ | 12,000.00 |
| G-100a | Mobilization and Demobilization | All Reg'd | L.S. | \$ | 3,000,000.00 | \$ | 3,000,000.00 |
| G-115a | Worker Meals and Lodging, or Per Diem | All Req'd | L.S. | \$ | 2,000,000.00 | \$ | 2,000,000.00 |
| G-130a | Field Office | All Reg'd | L.S. | \$ | 50,000.00 | \$ | 50,000.00 |
| G-130b | Field Laboratory | All Req'd | L.S. | \$ | 35,000.00 | \$ | 35,000.00 |
| G-130g | Nuclear Testing Equipment Storage Shed | 1 | Each | \$ | 8,000.00 | \$ | 8,000.00 |
| G-131a | Engineering Transportation (Truck) | 1 | Each | \$ | 40,000.00 | \$ | 40,000.00 |
| G-131b | Engineering Transportation (ATV) | 2 | Each | \$ | 15,000.00 | \$ | 30,000.00 |
| G-131c | Engineering Transportation (Snowmachine) | 2 | Each | \$ | 15,000.00 | \$ | 30,000.00 |
| G-135a | Construction Surveying by the Contractor | Ali Req'd | L.S. | \$ | 200,000.00 | \$ | 200,000.00 |
| G-200a | Contractor Quality Control Program | All Reg'd | L.S. | \$ | 300,000.00 | \$ | 300,000.00 |
| G-710a | Highway Traffic Maintenance | All Reg'd | L.S. | \$ | 60,000.00 | \$ | 60,000.00 |
| L-100b* | Regulator, L-828 | 1 | Each | \$ | 16,000.00 | \$ | 16,000.00 |
| L-100d* | Medium Intensity Runway Edge and Threshold Light, L-861 and L-861E | 64 | Each | \$ | 2,500.00 | \$ | 160,000.00 |
| L-100e* | Taxiway Edge Light, L-861T | 19 | Each | \$ | 2,500.00 | | 47,500.00 |
| L-100p* | Handhole, L-867, Size B | 4 | Each | \$ | 1,000.00 | | 4,000.00 |
| L-100q* | Junction Box, Type II | 2 | Each | \$ | 1,600.00 | \$ | 3,200.00 |
| L-100ap | Spare Parts | All Reg'd | L.S. | \$ | | \$ | 5,000.00 |
| L-101b* | Rotating Beacon, Medium Intensity, L-801A | 1 | Each | \$ | | \$ | 12,000.00 |
| 107a* | 8-foot Lighted Wind Cone, in place | 1 | Each | \$ | | \$ | 15,000.00 |

TOTAL PROJECT ESTIMATE

| Pay Item | Pay Item Description | Quantity | Pay Uni | Ur | nit Bid Price | 7/ | Amount Bid |
|-----------|---|-----------|---------|------|---------------|-----|---------------|
| Number | | | | | | | |
| L-108a* | Underground Cable #8 AWG, copper, 5 kV FAA type "C", L-824 | 15,700 | L.F. | \$ | 3.50 | , , | 54,950.00 |
| L-108c* | #6 Bare Copper Ground Conductor | 14,100 | L.F. | \$ | 3.00 | | 42,300.00 |
| L-108g* | Ground Rod | 28 | Each | \$ | 300.00 | , | 8,400.00 |
| L-109c* | Electrical Enclosure and Foundation in Place | 1 | Each | \$ | 45,000.00 | 1 | 45,000.00 |
| L-109d* | Installation of Electrical Equipment in New or Existing Structure | 1 | L.S. | \$ | 35,000.00 | 1 | 35,000.00 |
| L-110a* | 2-inch Rigid Steel Conduit | 650 | L.F. | \$ | 25.00 | 1 | 16,250.00 |
| L-110g* | 2-inch PE Conduit | 14,100 | L.F. | \$ | 8.00 | 3 | 112,800.00 |
| L-132a* | Instell Approach Lighting Aids | 1 | L.S. | \$ | 350,000.00 | \$ | 350,000.00 |
| L-145a | Generator System | 1 | L.S. | \$ | 300,000.00 | \$ | 300,000.00 |
| L-155a* | Flood Lighting | 1 | LS | \$ | 20,000.00 | \$ | 20,000.00 |
| P-152h(2) | Borrow Measured in Final Position | 455,000 | C.Y. | \$ | 45.00 | \$ | 20,475,000.00 |
| P-152af | Settlement Platform | 6 | Each | \$ | 1,500.00 | \$ | 9,000.00 |
| P-157a | Erosion, Sediment, and Pollution Control Administration | All Req'd | L.S. | \$ | 100,000.00 | \$ | 100,000.00 |
| P-165a | Removal of Structures | All Reg'd | L.S. | \$ | 31,000.00 | \$ | 31,000.00 |
| P-167a | Dust Palliative | 169,000 | S.Y. | \$ | 2.60 | \$ | 439,400.00 |
| P-190a | Insulation Board, R-20 | 1,400,000 | S.F. | \$ | 5.00 | \$ | 7,000,000.00 |
| P-208a | Crushed Aggregate Surface Course | 31,000 | C.Y. | \$ | 60.00 | \$ | 1,860,000.00 |
| P-208e* | Crushed Aggregate Surface Course Stockpile | 4,000 | C.Y. | \$ | 45.00 | \$ | 180,000.00 |
| P-640b | Segmented Circle (Panel-Type) | All Reg'd | L.S. | \$ | 42,000.00 | \$ | 42,000.00 |
| P-650a | Soll Anchor Tie-down, Buried Steel Plate | 3 | Set | \$ | 1,600.00 | \$ | 4,800.00 |
| 2-660b | Reflective Marker, Type II | 20 | Each | \$ | 140.00 | \$ | 2,800.00 |
| P-660c | Cone, 18-inch | 76 | Each | \$ | 100.00 | \$ | 7,600.00 |
| 9-661a | Standard Sign | 200 | S.F. | \$ | 180.00 | \$ | 36,000.00 |
| -671a | Runway Closure Marker, Vinyl Mesh Panel | 2 | Each | \$ | 35,000.00 | \$ | 70,000.00 |
| -681a | Geotextile, Separation | 240,000 | S,Y. | \$ | 3.50 | \$ | 840,000.00 |
| -700a | Ice Road | All Reg'd | L.S. | \$ 1 | ,000,000.00 | \$ | 1,000,000.00 |
| -901a | Seeding | 138,000 | S.Y. | \$ | 0.50 | \$ | 69,000.00 |

TOTAL PROJECT ESTIMATE

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | Uı | nit Bid Price | Am | ount Bid |
|--------------------|------------------------------|----------|----------|----|---------------|----|--------------|
| T-901c | Water for Maintenance | 1,200 | M-Gal | \$ | 35.00 | \$ | 42,000.00 |
| T-905a | Topsoiling | 138,000 | S.Y. | \$ | 3.00 | \$ | 414,000.00 |
| T-908a | Bonded Fiber Matrix | 138,000 | S.Y. | \$ | 2.00 | \$ | 276,000.00 |
| U-500b* | Electrical Line Extension | 1 | L.S. | \$ | 425,000.00 | \$ | 425,000.00 |
| X-xxx | Perforated HDPE Pipe, 3-inch | 1,100 | L,F. | \$ | 1.00 | \$ | 1,100.00 |
| Х-хжх | Existing Landfill Closure | 1 | L.S. | \$ | 50,000.00 | \$ | 50,000.00 |
| X-xxx | Wetland Mitigation Measures | 1 | L.S. | \$ | 1,000,000.00 | \$ | 1,000,000.00 |
| X-xxx | Landfill Burnbox | 1 | L.S. | \$ | 120,000.00 | \$ | 120,000.00 |
| X-xxx | Landfill/Sewage Lagoon Liner | 96,000 | S.F. | \$ | 1.50 | \$ | 144,000.00 |

TOTAL BASIC BID \$ 42,710,850

Construction Administration \$ 3,000,000

10% contingency \$ 4,571,000 TOTAL \$ 50,281,850

ASSUMPTIONS:

Single Season Gravel Haul

PHASE 1 ESTIMATE

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | U | nit Bid Price | A | mount Bid |
|--------------------|---|----------|----------|----|---------------|----|--------------|
| D-701a(1) | Corrugated Steel Pipe, 30-inch | 900 | L.F. | \$ | 225.00 | , | 202,500.00 |
| D-701a(2) | Corrugated Steel Pipe, 24-inch | 225 | L.F. | \$ | 200.00 | \$ | 45,000.00 |
| D-701a(3) | Corrugated Steel Pipe, 12-inch | 250 | L.F. | \$ | 175.00 | \$ | 43,750.00 |
| F-162a | 8-foot Chain-Link Fence | 0 | L.F. | \$ | 175.00 | \$ | - |
| F-162c | 20-foot Wide Double Swing Gate | 0 | Each | \$ | 5,000.00 | \$ | - |
| F-162e | 24-foot Wide Double Cantilever Gate | 0 | Each | \$ | 8,000.00 | \$ | - |
| F-162f | 4-foot Wide Pedestrian Gate (w/Keyless Lock) | 0 | Each | \$ | 1,500.00 | \$ | - |
| F-170a | Steel Bollard | 0 | Each | \$ | 1,200.00 | \$ | • |
| G-100a | Mobilization and Demobilization | 0.60 | L.S. | \$ | 3,000,000.00 | \$ | 1,800,000.00 |
| G-115a | Worker Meals and Lodging, or Per Diem | 0.40 | L.S. | \$ | 2,000,000.00 | \$ | 800,000.00 |
| G-130a | Field Office | 0.60 | L.S. | \$ | 50,000.00 | \$ | 30,000.00 |
| G-130b | Field Laboratory | 0.60 | L.S. | \$ | 35,000.00 | \$ | 21,000.00 |
| G-130g | Nuclear Testing Equipment Storage Shed | 0.60 | Each | \$ | 8,000.00 | \$ | 4,800.00 |
| G-131a | Engineering Transportation (Truck) | 0.80 | Each | \$ | 40,000.00 | \$ | 32,000.00 |
| G-131b | Engineering Transportation (ATV) | 1.60 | Each | \$ | 15,000.00 | \$ | 24,000.00 |
| G-131c | Engineering Transportation (Snowmachine) | 1.60 | Each | \$ | 15,000.00 | \$ | 24,000.00 |
| G-135a | Construction Surveying by the Contractor | 0.40 | LS. | \$ | 200,000.00 | \$ | 80,000.00 |
| G-200a | Contractor Quality Control Program | 0.40 | L.S. | \$ | 300,000.00 | \$ | 120,000.00 |
| G-710a | Highway Traffic Maintenance | 0.40 | L.S. | \$ | 60,000.00 | \$ | 24,000.00 |
| L-100b* | Regulator, L-828 | 0 | Each | \$ | 16,000.00 | \$ | |
| L-100d* | Medium Intensity Runway Edge and Threshold Light, L-861 and L-861E | 0 | Each | \$ | 2,500.00 | \$ | |
| L-100e* | Taxiway Edge Light, L-861T | 0 | Each | \$ | 2,500.00 | | _ |
| L-100p* | Handhole, L-867, Size B | 0 | | \$ | 1,000.00 | | |
| L-100q* | Junction Box, Type II | 0 | Each | \$ | | \$ | - |
| 100ap | Spare Parts | 0 | L.S. | \$ | | \$ | - |
| 101b* | Rotating Beacon, Medium Intensity, L-801A | 0 | | \$ | | \$ | _ |
| -107a* | 8-foot Lighted Wind Cone, in place | 0 | | \$ | | \$ | - |

5 of 13

PHASE 1 ESTIMATE

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | Unit Bid Pri | ce / | Amount Bid |
|--------------------|--|----------|----------|----------------|-------|---------------|
| L-108a* | Underground Cable #8 AWG, copper, 5 kV FAA type "C", L-824 | 0 | L.F. | \$ 3 | .50 | \$ - |
| L-108c* | #6 Bare Copper Ground Conductor | 0 | L.F. | \$ 3 | .00 | \$ - |
| L-108g* | Ground Rod | 0 | Each | \$ 300 | .00 | \$ - |
| L-109c* | Electrical Enclosure and Foundation in Place | 0 | Each | \$ 45,000 | .00 | \$ - |
| L-109d* | Installation of Electrical Equipment in New or Existing Structure | 0.00 | L.S. | \$ 35,000 | 00 | \$ - |
| L-110a* | 2-inch Rigid Steet Conduit | 0 | L.F. | \$ 25. | 00 | ş - |
| L-110g* | 2-inch PE Conduit | 0 | L.F. | \$ 8. | 00 | |
| L-132a* | Install Approach Lighting Aids | 0.00 | L.S. | \$ 350,000. | 00 ! | - |
| L-145a | Generator System | 0.00 | L.S. | \$ 300,000. | 00 5 | |
| L-155a* | Flood Lighting | 0.00 | LS | \$ 20,000. | 00 5 | |
| P-152h(2) | Borrow Measured in Final Position | 330,000 | C.Y. | \$ 45. | 00 \$ | 14,850,000.00 |
| P-152af | Settlement Platform | 3 | Each | \$ 1,500.0 | 00 \$ | 4,500.00 |
| P-157a | Erosion, Sediment, and Pollution Control Administration | 0.34 | L.S. | \$ 100,000.0 | 00 \$ | 34,000.00 |
| P-165a | Removal of Structures | 1.00 | L.S. | \$ 31,000.0 | 00 \$ | 31,000.00 |
| P-167a | Dust Palliative | 0 | S.Y. | \$ 2.0 | so \$ | |
| P-190a | Insulation Board, R-20 | 0 | S.F. | \$ 5.0 | 0 \$ | - |
| P-208a | Crushed Aggregate Surface Course | 0 | C.Y. | \$ 60.0 | 0 \$ | |
| 2-208e* | Crushed Aggregate Surface Course Stockpile | 0 | C.Y. | \$ 45.0 | 0 \$ | - |
| 2-640b | Segmented Circle (Panel-Type) | 0.00 | L.S. | \$ 42,000.0 | 0 \$ | - |
| 2-650a | Soil Anchor Tie-down, Buried Steel Plate | 0 | Set | \$ 1,600.0 | 0 \$ | - |
| -660b | Reflective Marker, Type II | 0 | Each | \$ 140.0 | 0 \$ | _ |
| -660c | Cone, 18-inch | 0 | Each | \$ 100.0 | 0 \$ | - |
| -661a | Standard Sign | 0 | S.F. | \$ 180.0 | 0 \$ | |
| -671a | Runway Closure Marker, Vinyl Mesh Panel | 0 | Each | \$ 35,000.0 | 0 \$ | _ |
| -681a | Geotextile, Separation | 240,000 | S.Y. | \$ 3.5 | 0 \$ | 840,000.00 |
| -700a | Ice Road | 1.00 | L.S. | \$ 1,000,000.0 | 5 | 1,000,000.00 |
| -901a | Seeding | 0 | S.Y. | \$ 0.50 | T | |

PHASE 2 ESTIMATE

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | U | nit Bid Price | A | mount Bid |
|--------------------|---|----------|----------|----|---------------|----|------------|
| D-701a(1) | Corrugated Steel Pipe, 30-inch | 0 | L.F. | \$ | 225.00 | | |
| D-701a(2) | Corrugated Steel Pipe, 24-inch | 0 | L.F. | \$ | 200.00 | \$ | - |
| D-701a(3) | Corrugated Steel Pipe, 12-inch | 0 | L.F, | \$ | 175.00 | \$ | _ |
| F-162a | 8-foot Chain-Link Fence | 4,300 | L.F. | \$ | 175.00 | \$ | 752,500.00 |
| F-162c | 20-foot Wide Double Swing Gate | 1 | Each | \$ | 5,000.00 | \$ | 5,000.00 |
| F-162e | 24-foot Wide Double Cantilever Gate | 1 | Each | \$ | 8,000.00 | \$ | 8,000.00 |
| F-162f | 4-foot Wide Pedestrian Gate (w/Keyless Lock) | 2 | Each | \$ | 1,500.00 | \$ | 3,000.00 |
| F-170a | Steel Bollard | 10 | Each | \$ | 1,200.00 | \$ | 12,000.00 |
| G-100a | Mobilization and Demobilization | 0.00 | L.S. | \$ | 3,000,000.00 | \$ | • |
| G-115a | Worker Meals and Lodging, or Per Diem | 0.40 | L.S. | \$ | 2,000,000.00 | \$ | 800,000.00 |
| G-130a | Field Office | 0.20 | L.S. | \$ | 50,000.00 | \$ | 10,000.00 |
| G-130b | Field Laboratory | 0.20 | L.S. | \$ | 35,000.00 | \$ | 7,000.00 |
| G-130g | Nuclear Testing Equipment Storage Shed | 0.20 | Each | \$ | 8,000.00 | \$ | 1,600.00 |
| G-131a | Engineering Transportation (Truck) | 0.10 | Each | \$ | 40,000.00 | \$ | 4,000.00 |
| G-131b | Engineering Transportation (ATV) | 0.20 | Each | \$ | 15,000.00 | \$ | 3,000.00 |
| G-131c | Engineering Transportation (Snowmachine) | 0.20 | Each | \$ | 15,000.00 | \$ | 3,000.00 |
| G-135a | Construction Surveying by the Contractor | 0.40 | L.S. | \$ | 200,000.00 | \$ | 80,000.00 |
| G-200a | Contractor Quality Control Program | 0.40 | L.S. | \$ | 300,000.00 | \$ | 120,000.00 |
| G-710a | Highway Traffic Maintenance | 0.40 | L.S. | \$ | 60,000.00 | \$ | 24,000.00 |
| L-100b* | Regulator, L-828 | 1 | Each | \$ | 16,000.00 | \$ | 16,000.00 |
| L-100d* | Medium Intensity Runway Edge and Threshold Light, L-861 and L-861E | 64 | Each | \$ | 2,500.00 | \$ | 160,000.00 |
| L-100e* | Taxiway Edge Light, L-861T | 19 | Each | \$ | 2,500.00 | \$ | 47,500.00 |
| L-100p* | Handhole, L-867, Size B | 4 | Each | \$ | | \$ | 4,000.00 |
| 100q* | Junction Box, Type II | 2 | Each | \$ | | \$ | 3,200.00 |
| -100ap | Spare Parts | 1.00 | | \$ | | \$ | 5,000.00 |
| 101b* | Rotating Beacon, Medium Intensity, L-801A | 1 | | \$ | | \$ | 12,000.00 |
| -107a* | 8-foot Lighted Wind Cone, in place | 1 | Each | \$ | 1 | \$ | 15,000.00 |

PHASE 2 ESTIMATE

| Pay Item | Pay Item Description | Quantit | viPav Unit | IUr | nit Bid Price | TA | Amount Bid |
|----------------|--|-----------|------------|------|---------------|----|--------------|
| Number | | | | | | ľ | |
| L-108a* | Underground Cable #8 AWG, copper, 5 kV FAA type "C", L-824 | 15,700 | L.F. | \$ | 3,50 | | 54,950.00 |
| L-108c* | #6 Bare Copper Ground Conductor | 14,100 | L.F. | \$ | 3.00 | | 42,300.00 |
| L-108g* | Ground Rod | 28 | Each | \$ | 300.00 | 1 | 8,400.00 |
| L-109c* | Electrical Enclosure and Foundation in Place | 1 | Each | \$ | 45,000.00 | , | 45,000.00 |
| L-109d* | installation of Electrical Equipment in New or Existing Structure | 1.00 | L.S. | \$ | 35,000.00 | \$ | 35,000.00 |
| L-110a* | 2-inch Rigid Steel Conduit | 650 | L.F. | \$ | 25.00 | \$ | 16,250.00 |
| L-110g* | 2-inch PE Conduit | 14,100 | L.F. | \$ | 8.00 | \$ | 112,800.00 |
| L-132a* | Install Approach Lighting Aids | 1.00 | L.S. | \$ | 350,000.00 | \$ | 350,000.00 |
| L-1 45a | Generator System | 1.00 | L.S. | \$ | 300,000.00 | \$ | 300,000.00 |
| L-155a* | Flood Lighting | 1.00 | LS | \$ | 20,000.00 | \$ | 20,000.00 |
| P-152h(2) | Borrow Measured in Final Position | 125,000 | C.Y. | \$ | 45.00 | \$ | 5,625,000.00 |
| P-152af | Settlement Platform | 3 | Each | \$ | 1,500.00 | \$ | 4,500.00 |
| P-1578 | Erosion, Sediment, and Pollution Control Administration | 0.33 | L.S. | \$ | 100,000.00 | \$ | 33,000.00 |
| P-165a | Removal of Structures | 0.00 | L.S. | \$ | 31,000.00 | \$ | • |
| P-167a | Dust Palliative | 150,000 | S.Y. | \$ | 2.60 | \$ | 390,000.00 |
| P-190a | Insulation Board, R-20 | 1,400,000 | S.F. | \$ | 5.00 | \$ | 7,000,000.00 |
| P-208a | Crushed Aggregate Surface Course | 31,000 | C.Y. | \$ | 60.00 | \$ | 1,860,000.00 |
| 2-208e* | Crushed Aggregate Surface Course Stockpile | 4,000 | C.Y. | \$ | 45.00 | \$ | 180,000.00 |
| P-640b | Segmented Circle (Panel-Type) | 1.00 | L.S. | \$ | 42,000.00 | \$ | 42,000.00 |
| -650a | Soll Anchor Tie-down, Buried Steel Plate | 0 | Set | \$ | 1,600.00 | \$ | |
| 2-660b | Reflective Marker, Type II | 0 | Each | \$ | 140.00 | \$ | |
| -660c | Cone, 18-Inch | 0 | Each | \$ | 100.00 | \$ | |
| -661a | Standard Sign | 200 | S.F. | \$ | 180.00 | \$ | 36,000.00 |
| -671a | Runway Closure Marker, Vinyl Mesh Panel | 0 | Each | \$ | 35,000.00 | \$ | |
| -681a | Geotextile, Separation | 0 | S.Y. | \$ | 3.50 | \$ | • |
| -700a | Ice Road | 0.00 | L.S. | \$ 1 | ,000,000,00 | \$ | - |
| -901a | Seeding | 138,000 | S.Y. | \$ | 0.50 | \$ | 69,000.00 |

PHASE 1 ESTIMATE

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | U | nit Bid Price | Amo | unt Bid |
|--------------------|--|----------|----------|----|---------------|-----|----------|
| T-901c | Water for Maintenance | 0 | M-Gal | \$ | 35.00 | \$ | |
| T-905a | Topsoiling | 0 | S.Y. | \$ | 3.00 | \$ | |
| T-908a | Bonded Fiber Matrix | 0 | S.Y. | \$ | 2.00 | \$ | |
| U-500b* | Electrical Line Extension | 0.00 | L.S. | \$ | 425,000.00 | \$ | |
| X-xxx | Perforated HDPE Pipe, 3-inch | 1,100 | L.F. | \$ | 1.00 | \$ | 1,100.00 |
| Х-хох | Existing Landfill Closure | 0.00 | L.S. | \$ | 50,000.00 | \$ | |
| Х-жж | Wetland Mitigation Measures | 0.00 | L.S. | \$ | 1,000,000.00 | \$ | |
| Х-хосх | Landfill Burnbox | 0.00 | L.S. | \$ | 120,000.00 | \$ | |
| Х-хжх | Landfill/Sewage Lagoon Liner (*) Non-AIP | 0 | S.F. | \$ | 1.50 | \$ | _ |

TOTAL BASIC BID \$ 20,011,650

Construction Administration \$ 1,500,000

10% contingency \$ 2,151,000 TOTAL \$ 23,662,650

ASSUMPTIONS:

All Gravel Hauled This Phase Construct 4-foot Embankment

PHASE 2 ESTIMATE

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | U | nit Bid Price | Am | ount Bid |
|--------------------|--|----------|----------|----|---------------|----|--------------|
| T-901c | Water for Maintenance | 1,200 | M-Gai | \$ | 35.00 | \$ | 42,000.00 |
| T-905a | Topsoiling | 138,000 | S.Y. | \$ | 3.00 | \$ | 414,000.00 |
| T-908a | Bonded Fiber Matrix | 138,000 | S.Y. | \$ | 2.00 | \$ | 276,000.00 |
| U-500b* | Electrical Line Extension | 1.00 | L.S. | \$ | 425,000.00 | \$ | 425,000.00 |
| Х-ххх | Perforated HDPE Pipe, 3-inch | 0 | L.F. | \$ | 1.00 | \$ | - |
| Х-хоох | Existing Landfill Closure | 0.00 | L.S. | \$ | 50,000.00 | \$ | |
| X-xxx | Wetland Mitigation Measures | 1.00 | L.S. | \$ | 1,000,000.00 | \$ | 1,000,000.00 |
| Х-хох | Landfill Burnbox | 1.00 | L.S. | \$ | 120,000.00 | \$ | 120,000.00 |
| Х-ххх | Landfill/Sewage Lagoon Liner (*) Non-AIP | 96,000 | S.F. | \$ | 1.50 | \$ | 144,000.00 |

TOTAL BASIC BID \$ 20,741,000

Construction Administration \$ 1,000,000

10% contingency \$ TOTAL \$ 2,174,000

23,915,000

ASSUMPTIONS:

Install Insulation Construct Embankment Install Airport Lighting

65% ENGINEER'S ESTIMATE NORTH SLOPE BOROUGH

Kaktovik Airport Relocation

1 Season Gravel Haul - Phase 3

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | Un | it Bld Price | An | nount Bid |
|--------------------|---|----------|----------|----|--------------|----|--------------|
| D-701a(1) | Corrugated Steel Pipe, 30-inch | 0 | L.F. | \$ | 225.00 | \$ | _ |
| D-701a(2) | Corrugated Steel Pipe, 24-inch | 0 | L.F. | \$ | 200.00 | \$ | _ |
| D-701a(3) | Corrugated Steel Pipe, 12-inch | 0 | L.F. | \$ | 175.00 | \$ | - |
| F-162a | 8-foot Chain-Link Fence | 0 | LF. | \$ | 175.00 | \$ | • |
| F-162c | 20-foot Wide Double Swing Gate | 0 | Each | \$ | 5,000.00 | \$ | - |
| F-162e | 24-foot Wide Double Cantilever Gate | 0 | Each | \$ | 8,000.00 | \$ | |
| F-162f | 4-foot Wide Pedestrian Gate (w/Keyless Lock) | o | Each | \$ | 1,500.00 | \$ | - |
| F-170a | Steel Bollard | 0 | Each | \$ | 1,200.00 | \$ | - |
| G-100a | Mobilization and Demobilization | 0.40 | L.S. | \$ | 3,000,000.00 | \$ | 1,200,000.00 |
| G-115a | Worker Meals and Lodging, or Per Diem | 0.20 | L.S. | \$ | 2,000,000.00 | \$ | 400,000.00 |
| G-130a | Field Office | 0.20 | L.S. | \$ | 50,000.00 | \$ | 10,000.00 |
| G-130b | Field Laboratory | 0.20 | L.S. | \$ | 35,000.00 | \$ | 7,000.00 |
| G-130g | Nuclear Testing Equipment Storage Shed | 0.20 | Each | \$ | 8,000.00 | \$ | 1,600.00 |
| G-131a | Engineering Transportation (Truck) | 0.10 | Each | \$ | 40,000.00 | \$ | 4,000.00 |
| G-131b | Engineering Transportation (ATV) | 0.20 | Each | \$ | 15,000.00 | \$ | 3,000.00 |
| G-131c | Engineering Transportation (Snowmachine) | 0.20 | Each | \$ | 15,000.00 | \$ | 3,000.00 |
| G-135a | Construction Surveying by the Contractor | 0.20 | L.S. | \$ | 200,000.00 | \$ | 40,000.00 |
| 3-200a | Contractor Quality Control Program | 0.20 | L.S. | \$ | 300,000.00 | \$ | 60,000.00 |
| G-710a | Highway Traffic Maintenance | 0.20 | L.S. | \$ | 60,000.00 | \$ | 12,000.00 |
| -100b* | Regulator, L-828 | 0 | Each | \$ | 16,000.00 | \$ | - |
| -100d* | Medium Intensity Runway Edge and Threshold Light, L-861 and L-861E | 0 | Each | \$ | 2,500.00 | \$ | _ |
| -100e° | Taxiway Edge Light, L-861T | 0 | Each | \$ | 2,500.00 | \$ | _ |
| -100p* | Handhole, L-867, Size B | 0 | Each | \$ | 1,000.00 | \$ | _ |
| -100q* | Junction Box, Type II | 0 | Each | \$ | | \$ | |
| -100ap | Spare Parts | 0.00 | L.S. | \$ | 5,000.00 | s | |

65% ENGINEER'S ESTIMATE NORTH SLOPE BOROUGH

Kaktovik Airport Relocation

1 Season Gravel Haul - Phase 3

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | Un | it Bid Price | Am | ount Bid |
|--------------------|--|----------|----------|----|--------------|----|-----------|
| L-1016* | Rotating Beacon, Medium Intensity, L-801A | 0 | Each | \$ | 12,000.00 | \$ | • |
| L-107a* | 8-foot Lighted Wind Cone, in place | 0 | Each | \$ | 15,000.00 | s | |
| L-108a* | Underground Cable #8 AWG, copper, 5 kV FAA type "C", L-824 | 0 | L.F. | \$ | 3.50 | T | _ |
| L-108c* | #6 Bare Copper Ground Conductor | 0 | L.F. | \$ | 3.00 | \$ | - |
| L-108g* | Ground Rod | 0 | Each | \$ | 300.00 | \$ | - |
| L-109c* | Electrical Enclosure and Foundation in Place | 0 | Each | \$ | 45,000.00 | \$ | • |
| L-109d* | Installation of Electrical Equipment in New or Existing Structure | 0.00 | L.S. | \$ | 35,000.00 | \$ | - |
| L-110a* | 2-inch Rigid Steel Conduit | 0 | L.F. | \$ | 25.00 | \$ | - |
| L-110g* | 2-inch PE Conduit | 0 | L.F. | \$ | 8.00 | \$ | |
| L-132a* | Install Approach Lighting Aids | 0.00 | L.S. | \$ | 350,000.00 | \$ | |
| L-145a | Generator System | 0.00 | L.S. | \$ | 300,000.00 | \$ | |
| 155a* | Flood Lighting | 0.00 | LS | \$ | 20,000.00 | \$ | _ |
| P-152h(2) | Borrow Measured in Final Position | 0 | C.Y. | \$ | 45.00 | \$ | |
| P-152af | Settlement Platform | 0 | Each | \$ | 1,500,00 | \$ | |
| P-157a | Erosion, Sediment, and Pollution Control Administration | 0.33 | L.S. | \$ | 100,000.00 | \$ | 33,000.00 |
| P-165a | Removal of Structures | 0.00 | L.S. | \$ | 31,000.00 | \$ | - |
| P-167a | Dust Palliative | 19,000 | S.Y. | \$ | 2.60 | \$ | 49,400.00 |
| -190a_ | Insulation Board, R-20 | 0 | S.F. | \$ | 5.00 | \$ | • |
| -208a | Crushed Aggregate Surface Course | 0 | C.Y. | \$ | 60.00 | \$ | |
| -208e* | Crushed Aggregate Surface Course Stockpile | 0 | C.Y. | \$ | 45.00 | \$ | - |
| -640b | Segmented Circle (Panel-Type) | 0.00 | L.S. | \$ | 42,000.00 | \$ | - |
| -650a | Soil Anchor Tie-down, Buried Steel Plate | 3 | Set | \$ | 1,600.00 | \$ | 4,800.00 |
| -660b | Reflective Marker, Type II | 20 | Each | \$ | 140.00 | \$ | 2,800.00 |
| -660c | Cone, 18-Inch | 76 | Each | \$ | 100.00 | \$ | 7,600.00 |
| -661a | Standard Sign | 0 | S.F. | \$ | 180.00 | \$ | |

65% ENGINEER'S ESTIMATE NORTH SLOPE BOROUGH

Kaktovik Airport Relocation

1 Season Gravel Haul - Phase 3

| Pay Item Number | Pay Item Description | Quantity | Pay Unit | Ur | nit Bid Price | Amount Bid | | |
|--------------------|---|----------|----------|----|---------------|------------|-----------|--|
| P-671a | Runway Closure Marker, Vinyl Mesh Panel | 2 | Each | \$ | 35,000.00 | \$ | 70,000.00 | |
| P-681a | Geotextile, Separation | 0 | S.Y. | \$ | 3.50 | \$ | <u>.</u> | |
| P-700a | ice Road | 0.00 | L.S. | \$ | 1,000,000.00 | \$ | 4 | |
| T-901a | Seeding | 0 | S.Y. | \$ | 0.50 | \$ | | |
| T-901c | Water for Maintenance | 0 | M-Gal | \$ | 35.00 | \$ | | |
| T-905a | Topsoiling | 0 | S.Y. | \$ | 3.00 | \$ | | |
| T-908a | Bonded Fiber Matrix | 0 | S.Y. | \$ | 2.00 | \$ | • | |
| U-500b* | Electrical Line Extension | 0.00 | L.S. | \$ | 425,000.00 | \$ | - | |
| Х-ххх | Perforated HDPE Pipe, 3-inch | 0 | L.F. | \$ | 1.00 | \$ | - | |
| Х-ххх | Existing Landfill Closure | 1.00 | L.S. | \$ | 50,000.00 | \$ | 50,000.00 | |
| X-xxx | Wetland Mitigation Measures | 0.00 | L.S. | \$ | 1,000,000.00 | \$ | | |
| X-x00x | Landfill Burnbox | 0.00 | L.S. | s | 120,000.00 | \$ | _ | |
| X-xxx | Landfill/Sewage Lagoon Liner | 0 | S.F. | \$ | 1.50 | | _ | |

(*) Non-AIP

TOTAL BASIC BID \$ 1,958,200

Construction Administration \$ 1,000,000

10% contingency \$
TOTAL \$ 296,000

3,254,200

ASSUMPTIONS:

Fencing Apron Construction Seeding



Biological Assessment for the Relocation of the Kaktovik Airport

Kaktovik, Alaska



Prepared for

The North Slope Borough

Department of Public Works, CIPM Division 3000 C Street, Suite N201 Anchorage, Alaska 99502 Attn: Laura Strand, Project Manager

June 2011

Prepared by



In Cooperation with The North Slope Borough's Department of Wildlife Management

Executive Summary

The Kaktovik Airport Relocation project will relocate the community's airport from an exposed gravel spit located northeast of Barter Island between the Okpilak and Jago rivers on the Beaufort Sea to a new location near the center of Barter Island. The existing runway is exposed to water on three sides and is periodically submerged by Beaufort Sea storms. This action is necessary to provide a flood-resistant facility above the 100-year elevation that is consistent with the Federal Aviation Administration (FAA)'s mission and design standards. The North Slope Borough (NSB), the airport sponsor, proposes to construct a new 4,500-foot by 100-foot runway, taxiway, apron, access road, and airport lighting system. A new access road, landfill and sewage lagoon will be constructed and the existing landfill and sewage lagoon will be closed and the land used for the apron area. The material source for this project will be from an upland source on the mainland approximately 3.5 miles south of Barter Island. An ice road will be constructed across the Kaktovik Lagoon for the material haul. The project will require approximately 873,000 cubic yards (CY) of gravel fill.

The purpose of this Biological Assessment (BA) is to assess the effect of the proposed action on the species and critical habitats listed under the Endangered Species Act (ESA). This BA identifies the potential project effects including direct, indirect, interrelated, and interdependent effects. Table 1 provides a list of species analyzed and the effects determination.

Table ES-1 – ESA Effects Determination

| Species | Listing status | Critical Habitat Status | Effects Determination for Species | Effects Determination for Critical Habitat | | |
|--|-------------------|-----------------------------------|--|---|--|--|
| Polar bear (Ursus maritimus) | Threatened | Designated in action area | May affect, not likely to adversely affect | May affect, not likely to adversely affect | | |
| Steller's eider (Polysticta stelleri) | Threatened | Designated outside of action area | May affect, not likely to adversely affect | No effect | | |
| Spectacled eider (Somateria fischeri) | Threatened | Designated outside of action area | May affect, not likely to adversely affect | No effect | | |

North Slope Borough

OFFICE OF THE MAYOR

P.O. Box 69 Barrow, Alaska 99723 Phone: 907 852-2611 or 0200 Pax: 907 852-0337

Charlotte E. Brower, Mayor

January 12, 2012

Mr. Byron Huffman Manager, Alaskan Region Airports Division Federal Aviation Administration 222 W. 7th Avenue, Box 14 Anchorage, Alaska 99513-7587

RE: Kaktovik Airport Project Funding

Dear Mr. Huffman:

I am writing to you in response to your letter dated November 16, 2011 addressed to Past Mayor Edward Itta about the Airport Improvement Program (AIP) and the proposed new airport in Kaktovik. In your letter you outlined the available AIP funding currently planned for use on the construction of the new airport totaling \$36 million dollars. We understand that the engineer's estimate is currently at \$50.3 million, leaving a deficit of \$14.3 million needed for the construction.

The North Slope Borough (NSB) fully supports the new airport, and is prepared to provide the funds necessary to fill this deficit. The new airport in Kaktovik is a top priority project for us and we have provided a financial plan and time line listed below. We propose that the construction contract be issued under a 2-phased Notice to Proceed (NTP):

Construction Phase 1

FY2012 \$23.00 million AIP funding (Construction Phase 1) FY2012 \$1.21 million NSB Provided Match Funding

FY2012 \$1.5 million NSB/Private Funding

\$25.71 million

Construction Phase 2

FY2013 \$13.00 million AIP funding (Construction Phase 2) FY2013 \$00.68 million NSB Provided Match Funding FY2013

\$12.94 million NSB/Private Funding

\$26.62 million

We continue to seek additional outside funding sources as a means to help meet this deficit but we are prepared at this time to commit to required funding necessary to construct the new airport on the schedule provided in this letter. We hope this will satisfy FAA information requirements to allow us to secure the AIP funding to meet both FY2012 and FY2013 funding cycles.

Please do not hesitate to contact Dave Hodges, CIPM Program Manager, 907-646-8276 or Laura Strand, P.E., CIPM Project Administrator, at 907-646-8274 if there are additional questions.

Sincerely,

Ms. Charlotte E. Brower, Mayor

Charlo Wo Brower

North Slope Borough

CC: Jacob Adams, NSB CAO
James H. Sceeles, Director CIPM
Charlie Sakeagak, Director Public Works
Brad Garland, FAA
Krisjon Tabisola, FAA
Laura Strand, NSB CIPM
Dave Hodges, NSB CIPM

Randy Hoffbeck, Director Admin & Finance Tom Nicolos, NSB Airports Manager

Project Cost Summary

| | | | | | | Carrinary | | | | | | |
|------------------|---------------------------|----------------------------------|----|---------------------------------------|----|-------------------|----|----------------------|-------------|------------|----|------------|
| Project Phase | Duration | Estimated onstruction Cost | Co | Estimated onstruction dmin Cost | С | 10% ontingency | Т | otal Project Cost | FAA Funding | | NS | SB Funding |
| Phase 1 | July 2012 - April 2014 | \$ 20,011,650 | \$ | 1,500,000 | \$ | 2,151,165 | \$ | 23,663,000 | \$ | 22,479,850 | \$ | 1,183,150 |
| Phase 2 | April 2014 - Sept 2015 | \$ 22,699,200 | \$ | 1,500,000 | \$ | 2,419,920 | \$ | 26,619,000 | \$ | 13,000,000 | \$ | 13,619,000 |
| | | \$ 42,710,850 | \$ | 3,000,000 | \$ | 4,571,000 | \$ | 50,282,000 | \$ | 35,479,850 | \$ | 14,802,150 |